

Te Ahu a Turanga; Manawatū Tararua HighwayNotices of Requirement for Designations Executive Summary



Executive Summary

1. INTRODUCTION

The indefinite closure of State Highway 3 (SH3) through the Manawatū Gorge (Gorge), due to major slips in April 2017 and ongoing geotechnical instability, has created significant disruption for travellers between the regions of Manawatū /Whanganui in the west and the Tararua District, Wairarapa and Hawke's Bay in the east, and for people living in and around Ashhurst and Woodville.

The New Zealand Transport Agency (NZ Transport Agency) is working to open a new section of SH3, to replace the severed route through the Gorge, as soon as possible. The project is named **Te Ahu a Turanga**; **Manawatū Tararua Highway** (the Project).

The NZ Transport Agency has now lodged notices of requirement for designations (NoRs) with three councils; most of the Project falls within the jurisdiction of Tararua District Council, and parts at the western end are within Manawatū District or Palmerston North City.

The NoRs are the initial approvals required under the Resource Management Act 1991 (RMA) to construct and operate the Project. They identify the area of land to be designated in which the Project will be built. During 2019, the Project will be designed in detail, and the remaining RMA permissions (namely resource consents and outline plans) will be sought at that time, with construction commencing urgently thereafter. This two-stage RMA process has been adopted with a view to opening the new road as soon as possible.

The Project is approximately 11.5km long and will tie in with SH3 at new roundabouts near Ashhurst and Woodville. Between the roundabouts, the Project will be designed to an operating speed of 100km/h and comprise two lanes (plus additional crawler lanes, which are required due to steep grades and to maintain a consistent corridor) with a median barrier and outside shoulders wide enough to accommodate cyclists.

The general location of the Project is shown in Figure 1 overleaf, and the proposed designation is shown in Figure 2.



Figure 1: Location of Te Ahu a Turanga; Manawatū Tararua Highway

Figure 2: Proposed Designation for Te Ahu a Turanga; Manawatū Tararua Highway (the purple lines mark the outline of the designation)



2. BACKGROUND TO THE PROJECT

Over many years, travel through the Gorge has periodically been disrupted by landslides. Large slips in April 2017 caused the most recent closure of the road and geotechnical studies have highlighted an imminent and ongoing risk of further mass land movements. Dangers to the physical safety of workers and road users are such that SH3 through the Gorge has been closed indefinitely.

From its opening in 1872, the road through the Gorge provided a vital transport connection and, before it closed in April 2017, it carried around 7,600 vehicles per day. It was also an important national freight link, connecting the logistics hub in Palmerston North with the Tararua District, Wairarapa and Hawke's Bay, and was used by many freight vehicles and other travellers making longer journeys up and down the North Island.

Traffic between east and west has since diverted to Saddle Road and Pahīatua Track. As well as significantly increasing travel times – associated increases in vehicle operating costs are estimated to be more than \$22 million per annum – closure of the Gorge road has had a serious impact on traffic safety. The alternative routes wind through challenging terrain and are not designed to accommodate large volumes of State Highway traffic.

As a result, crashes on Saddle Road and Pahīatua Track have increased, and cyclists have been advised not to use Pahīatua Track (which is a part of the New Zealand Cycle Trail Touring Route). Further, a large influx of trucks and other traffic through Ashhurst has adversely affected amenity values¹ in that community.

These serious issues will worsen over time as traffic volumes increase (as they are predicted to do).

The Project addresses these problems and will provide significant benefits in terms of safety, resilience and efficiency. Accordingly, the Project is a key priority for the NZ Transport Agency (as reflected in the National Land Transport Programme 2018 – 2021) and is described in Horizons' Regional Land Transport Plan as being "critical for regional economic growth".

The benefits of the Project include those set out below.

- The Project will achieve significant safety improvements for road users through:
 - the reinstatement of a connection between Manawatū and the Tararua District, built to much safer geometric standards than Saddle Road and Pahīatua Track (and the now-closed road through the Gorge), including continuous median separation of east and west bound traffic;
 - o an enhanced traffic environment on Saddle Road and Pahīatua Track, due to traffic redistributing from those routes to the Project, with particular benefits

¹ "Amenity values" are those natural and physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

- for cyclists seeking to use Pahīatua Track as part of the New Zealand Cycle Trail Touring Route; and
- a greatly enhanced transport environment for residents, pedestrians, and cyclists in Ashhurst, as the trucks and other traffic move away from the community onto the new highway.
- Generally speaking, the Project will increase capacity within the roading network and improve efficiency for general traffic and freight, including public transport and emergency services.
- In particular, the Project will improve efficiency by significantly reducing travel times between:
 - Ashhurst and Woodville, by more than 10 minutes for light vehicles, emergency services, buses, and freight, approximately halving the existing travel time (and providing a faster connection than SH3 through the Gorge did); and
 - Aokautere (SH57 South) and SH2 to the north of Woodville the saving for this trip will be more than 24 minutes, again approximately halving the current travel time (via Pahīatua Track and Mangahao Road).
- The Project will greatly improve the resilience of the transport network in the event of a significant earthquake and/or slip, road accidents, or other disruption, by providing:
 - a new route between Manawatū, the Tararua District and Wairarapa, built to modern standards, that is more resilient to incidents and events than the road through the Gorge (Saddle Road and Pahīatua Track will continue to offer alternative routes); and
 - o a new high-quality bridge crossing of the Manawatū River.
- The Project will promote economic development in the Manawatū-Whanganui, Tararua District and Wairarapa regions, including through:
 - o significant improvements in efficiency for freight movements and reduced travel times as noted above, current inefficiencies are estimated to be costing more than \$22 million per annum; and
 - o increased economic activity and employment opportunities during the Project's construction period.
- The Project has a high degree of alignment with key strategic planning instruments, including the Regional Land Transport Plan.

3. DESCRIPTION OF THE ENVIRONMENT

The Project is approximately 11.5km long and traverses predominantly farmed hill country at the southern end of the Ruahine Range, between Ashhurst in the west and Woodville in the east.

The landscape traversed by the Project is rich in cultural connections and of deep significance to tangata whenua. Special associations are held with the Manawatū River, Te

Āpiti (the Gorge), and the wider Ruahine Range. Te Ahu a Turanga, a wāhi tapu on a hilltop near Saddle Road, is of particular importance to Rangitāne (and is avoided by the Project).

The environment comprises the following major elements:

- The townships of Ashhurst and Woodville are located on a terrace and plains (respectively) at either extent of the Project.
- The Ruahine Range separates the two townships. It includes areas recognised as Outstanding Natural Features and Landscapes and areas identified within Schedule G (Landscapes) of the Horizons One Plan, Manawatū District Plan and Palmerston North City Council District Plan.
- At the western boundary of the Project is the existing SH3 bridge across the Manawatū River. The Project traverses a river terrace to the south of the Gorge, which is largely a grazed area with exotic woodlots, shelterbelts, and other trees.
- The Project crosses the Manawatū River on a new bridge to be built to the east of Parahaki Island, a significant cultural and historical site at the confluence of the Manawatū and Pohangina Rivers.
- The Project passes through a narrow corridor between Parahaki Island and the highly valued Manawatū Gorge Scenic Reserve, crosses a river terrace featuring significant indigenous vegetation, and ascends an area of hill country. The hill country is extensively grazed and largely in pasture, but is broken by several deep gullies and streams containing forest areas (including two which are subject to Queen Elizabeth II Trust open space covenants).
- The Project traverses agricultural land that contains Meridian's Te Āpiti Wind Farm; wind turbines are located on both sides of the Project, connected by access tracks.
- At the crest of the Ruahine Range, a wide, rolling area of farmland separates the western hill slopes from the steeper eastern hill slopes. Towards the eastern end of that area, the Project crosses the site of a long-term fertiliser trial on AgResearch's Ballantrae research farm, near the eastern end of Saddle Road.
- The Project descends the steep hills at the eastern end of the Ruahine Range, crosses an unnamed stream at the foot of the Range, and traverses the agricultural plains surrounding Woodville.

Much of the area has been modified by human activity over hundreds of years, resulting in variable land cover along the route. The Project area generally consists of rural pasture, with pockets of native forest (comprising approximately 10% of the proposed designation area) and some exotic vegetation.

In addition to the Te Āpiti Wind Farm, network utilities and infrastructure near the Project area include KiwiRail's Palmerston North to Gisborne railway, First Gas' high pressure gas pipeline, Tararua District Council's closed Woodville Landfill (located off Saddle and Morgan Roads), Transpower's Mangamaire – Woodville A 110kV transmission line, and a number of other utilities such as local electricity distribution lines, water supply pipelines, and telecommunications cables.

4. DESCRIPTION OF THE PROJECT

Key design features of the Project are summarised below.

The Project will be designed to a rural highway standard. Crawler lanes will be required across most of the route (due to some steep grades and to minimise merges and diverges between those areas), so in effect the Project will consist of two 3.5m-wide traffic lanes in each direction.

The highway will have 2-2.5m outside shoulders and a 4-6m central median. A median wire rope barrier will be provided along its entire length, with crossover points at appropriate locations to allow U-turn movements by emergency vehicles. Otherwise, the Project limits direct access to and from the new road in order to maximise safety. Roadside barriers (edge protection) will also be provided for safety reasons and these will comprise of rigid barrier systems on all proposed bridges.

There will be a new four-arm, two-lane roundabout connection with SH57 to the east of Ashhurst, and a new five-arm, single-lane roundabout connection with existing SH3 west of Woodville. These will act as gateways to Woodville and Ashhurst/ Palmerston North and provide a transition between the new and existing road networks.

The highway will be designed for vehicles to travel safely at a posted 100km/h speed limit.

A low-noise road surface (such as Open-Graded Porous Asphalt or "OGPA") will be used in Ashhurst, on Napier Road east of the Cambridge Ave intersection, and through Woodville.

There will be no lighting along the highway (due to the rural nature of the locality), except at the roundabouts.

New access to any severed private property will be provided from local roads and/or by underpasses created beneath the highway. Specific underpasses have been indicatively located to maintain access between parts of AgResearch's field trial site and for Meridian to access wind turbines in the Te Āpiti Wind Farm. Access between the parts of the farm located between Hope Road and SH3 Napier Road (on the Woodville side of the ranges) will be provided as part of the proposed bridge across the unnamed stream.

The Project allows for pull over areas adjacent to the east and west-bound lanes, which will likely be provided in conjunction with maintenance service areas.

The Project indicatively includes seven bridge structures, including a long bridge across the Manawatū River.

The detailed design of the Project will be undertaken in general accordance with an Environmental and Cultural Design Framework (ECDF); an initial draft has been developed in conjunction with tangata whenua and Councils, and will be updated collaboratively as the Project develops. The ECDF sets out the overarching design principles and a 'vision' to be applied to the final design of Project structures, landform, and any planting associated with the Project.

Project earthworks will all take place within the proposed designations. Construction works will include earth embankments and areas of cut and fill; indicatively, around 3.8 million cubic metres of excavated (cut) material will be used as fill within the designation. Any further fill required for the Project will likely be sourced from nearby quarries or other extraction sites. Excess cut material including material that is unsuitable for road construction, will be disposed of at spoil sites within the proposed designation.

The stormwater management and treatment devices for the construction and operation of the Project will be addressed through detailed design, and will achieve consistency with the NZ Transport Agency's and Horizons Regional Council's requirements. Erosion and sediment control measures will be provided, and particular safeguards will be adopted for works in and around water bodies.

The detailed design and construction of the Project will take approximately five to seven years. As the target date for opening the new road is 2024, the constructor will be required to identify opportunities to meet the target date (such as carrying out numerous construction activities concurrently across the Project site).

The Project intersects with a number of network utilities, including the rail corridor, telecommunications, gas transmission, electricity and water services. The protection or relocation of these services, and maintaining their on-going operation, will be part of the detailed design phase of the Project.

5. CONSIDERATION OF ALTERNATIVES

Following the abrupt closure of SH3 through the Gorge in April 2017, the NZ Transport Agency tasked designers with identifying an appropriately broad range of possible alternative routes for a replacement road.

This was not a simple task, as the Tararua and Ruahine Ranges feature widespread associations for tangata whenua, very challenging terrain and natural hazards, significant landscapes, ecological values, public reserves, and many private landholdings, among other constraints. A Long List of 18 options was devised, including options through the Gorge itself, tunnel options, and hybrid routes added during the process as additional information came to light.

A large multi-disciplinary team processed information to assess those alternatives and guide the NZ Transport Agency's choice of route for the Project, in tandem with a Detailed Business Case (DBC) process used to inform the investment decisions relating to the Project.

The first phase in that process was evaluating the Long List of 18 options, which involved Multi-Criteria Analysis (MCA) with inputs from tangata whenua, stakeholders, and technical

² A cut is where earthworks operations 'cut' through soil or rock; a fill is where soil or other material is used to fill a depression or form a mound or embankment.

specialists. The options were assessed against the Project objectives of resilience, safety, and efficiency, environmental factors, and 'implementability' criteria.

The outcome of that process was identification of a Short List of four alternative routes; Option 1 was to the north of Saddle Road (avoiding all wind farms in the area), Option 2 involved a large-scale upgrade of Saddle Road, Option 3 was situated between Saddle Road and the Gorge, and Option 4 was to the south of the Gorge.

The Short List was then assessed using a similar MCA process, and factoring in additional information obtained by technical specialists and feedback received through public consultation and stakeholder engagement.

Different options performed better than others against different criteria. The NZ Transport Agency selected Option 3 as its preference, in short because it provided the best transport outcomes, performed well against the implementability criteria, and had similar risks to the other options in terms of adverse environmental effects.

In parallel, NZ Transport Agency assessed alternatives for connecting Options 1, 2 and 3 with SH3 at or near Ashhurst. Sub-option A was the preferred connection and is now incorporated into the Project, including the new bridge across the Manawatū River.

The NZ Transport Agency and its expert team have since considered alternatives further in shaping the proposed designations. This wide-ranging programme of work has involved, among other things:

- ongoing collaboration with tangata whenua;
- further discussions with Meridian, AgResearch and other landowners, focusing on ways in which any adverse effects of the designations on them can be minimised; and
- an iterative process of design and effects assessment, allowing the extent of the designations to be adjusted in response to potential adverse environmental effects.

As a result of these processes, the proposed designations (among other things):

- incorporate roundabout intersections for improved safety;
- feature extended crawler lanes;
- provide access to the Manawatū Gorge Scenic Reserve carpark via a 4th leg to the roundabout opposite SH57 and the old section of SH3;
- are narrowed where they traverse areas subject to QEII Trust open space covenants, and the AgResearch site; and
- avoid a significant length of the existing stream on the eastern slopes of the Ruahine Range.

6. CONSULTATION AND ENGAGEMENT

The closure of the Gorge had an immediate and very significant impact on people's lives and, as such, was accompanied by strongly expressed public views as to the urgent need for a solution. It has therefore been vital for the people of Manawatū-Whanganui and the

Tararua District, and stakeholders from further afield, to play a central role in the Project's development.

With this as a key focus, the NZ Transport Agency has adopted a process of collaborating closely with tangata whenua, local authorities, stakeholders, and the public in devising the Project, and communicating Project information widely.

Tangata whenua are core members of the team progressing the Project, as they will explain through this process.

Close ongoing engagement with Tararua District Council, Manawatū District Council, Palmerston North City Council, and Horizons has been undertaken in developing the Project to date, and open channels of communication will remain important features of the Project as it is constructed and becomes operational.

In addition, the NZ Transport Agency has brought a high degree of transparency to its (usually internal) processes of design, assessment by specialists, and development of environmental mitigation and offsetting measures (as well as the assessment of alternatives). For example:

- the NZ Transport Agency has facilitated wide-ranging discussions in numerous workshops and other public fora about environmental effects and other matters;
- experts advising the NZ Transport Agency have openly shared their methodologies for assessing effects, their findings, and recommended mitigation measures, both through stakeholder workshops and discussion with experts assisting the councils; and
- specialist reports, conditions, and the other NoR documentation have been shared widely, in draft, with councils and stakeholder organisations, and feedback has been sought, provided, and factored into the finalised documents.

These steps have been taken because the NZ Transport Agency understands the widespread public interest in the Project being realised quickly, and considers that this can best be achieved by devising a high-quality Project that attracts support from as many people and organisations as possible.

The feedback obtained through these consultation and engagement processes has been invaluable in getting the Project to this point, including in terms of:

- developing potential alternative route options, and assessing the Long List and Short List of options;
- developing the ECDF to guide the detailed design, and developing proposed mitigation; and
- refining the proposed designation boundaries and conditions, which has been informed by a very large number of meetings with landowners and others with key interests in the potentially affected areas. Minimising adverse effects on Meridian, AgResearch and other landowners (including where such land is subject to Queen Elizabeth II Trust open space covenants) has been a major focus of this process.

7. ASSESSMENT OF EFFECTS ON THE ENVIRONMENT

The NoRs include an AEE (assessment of effects on the environment) that has been prepared in accordance with the relevant provisions of the RMA. The AEE describes in detail the range of actual or potential effects, both positive and adverse, that allowing the NoRs will have on the environment.

The AEE and accompanying documentation take a conservative, 'realistic worst-case' approach to the assessment of effects, given that the final design of the road has not yet been established. This means that the assessments have considered the possible effects if the new road were built in a way that would have the greatest environmental impact within the area of the proposed designations.

Many of the adverse effects of allowing the NoRs will be limited to the period during which the Project is constructed. A suite of measures is proposed to address those temporary adverse effects, as well as longer-lasting effects.

The NoRs identify the area of land to be designated, within which the Project will be built. During 2019, outline plans will be submitted to relevant councils. The outline plans will describe in detail the height, shape, and bulk of the works, the finished contour of the site, the proposed planting, and other mitigation measures that demonstrate how adverse effects will be managed.

Resource consents will also be sought for works in water courses, large-scale earthworks, discharges of stormwater, vegetation clearance, and other matters. The effects of those activities will be assessed at that time, in light of the detailed design of the Project and an updated mitigation proposal.

The various effects and the mitigation measures proposed are summarised below.

Transport Effects, Resilience, and Economic Benefits

From a transport perspective, there is an urgent need for the Project.

As noted above, the Project will have significant positive transport effects at a local, regional, and national scale, including the following:

- The Project will bring major improvements in road safety, including through:
 - the reinstatement of a high-quality connection between Manawatū, the Tararua
 District and Wairarapa, built to safe geometric standards;
 - an enhanced traffic environment on Saddle Road and Pahīatua Track, with particular benefits for people cycling the New Zealand Cycle Trail; and
 - a greatly enhanced transport environment for residents, pedestrians, and cyclists in the Ashhurst township.
- The Project will improve efficiency by halving travel times between:
 - Palmerston North and Woodville (and improving on past travel times along the Gorge road); and

- o Aokautere (SH57 South) and SH2 to the north of Woodville.
- The Project will greatly enhance the resilience of the transport network to disruptions from natural hazards or road accidents, by providing:
 - o a new route between the regions with improved resilience; and
 - o a new high-quality bridge crossing of the Manawatū River.
- The Project will have flow-on economic benefits, including through:
 - o significant improvements in efficiency for freight movements; and
 - o increased economic activity and employment during construction.

The Project will result in a large increase in traffic on the existing SH3 Ashhurst Bridge over the Manawatū River, essentially reverting to a situation similar to that before closure of SH3 through the Gorge. The provision of a dedicated path for pedestrians or cyclists on the bridge will be investigated as a separate project in the National Land Transport Plan.

Access to most of the private properties affected by the Project (including the Te Āpiti Wind Farm) is via Saddle Road and so will be greatly improved once the Project is operational as almost all current Saddle Road traffic will transfer to the Project. Specific accesses beneath the highway will be provided, including for Meridian and AgResearch.

During construction, there will be localised, relatively short-term, adverse traffic effects, including delays or inconvenience arising from increased heavy construction traffic through Ashhurst and onto the Saddle Road. These effects will be managed through a Construction Traffic Management Plan and ongoing close liaison with the local community.

Effects on Tangata Whenua Values

Devising a Project that has acceptable adverse effects on values important to tangata whenua has been critical for the NZ Transport Agency. The statutory acknowledgements provided through Treaty settlement legislation have provided important context.

The Project has benefited immensely from the guidance provided by Rangitaane o Manawatū, Rangitāne o Tamaki Nui-ā-Rua, and Ngāti Kahungunu ki Tāmaki Nui-ā-Rua, including in relation to selecting a route for the new highway, developing the ECDF and other conditions to guide the detailed design of the Project, identifying the proposed designation boundaries, and developing potential mitigation and offsetting measures.

The NZ Transport Agency also values the relationship it has with Ngāti Raukawa and looks forward to developing a Project that responds appropriately to their interests.

Overall, the NZ Transport Agency seeks to operate in a manner that is respectful of tikanga and that ensures Māori who identify with an area have the ability to express that, if they wish to do so, through the statutory processes.

Various conditions are proposed to ensure that the Project respects and reflects the cultural environment within which it will be built, and to acknowledge and promote the role of tangata whenua as kaitiaki.

Social Effects

The Project is being progressed urgently in order to minimise and address the impact that the closure of the Gorge road has had on people and communities at a local, regional, and national scale. Achieving major social benefits is therefore a fundamental aim of the NZ Transport Agency in developing the Project.

As noted above, the Project will have significant safety, resilience, and efficiency benefits, which will bring about social benefits for residents and businesses in Ashhurst, Woodville, and throughout the wider districts and regions connected by the new highway. The Project will also enhance the 'vitality' of Woodville's main street.

The Project will also give rise to some adverse social effects. Most of these relate to the use of Saddle Road by construction vehicles, which will exacerbate (to a generally low degree) the issues with the use of this route that have been caused by the large influx of traffic following the closure of SH3 through the Gorge.

These construction traffic effects will be managed through open communication and community liaison, and by controlling and seeking to minimise construction traffic movements on the Saddle Road.

Noise and Vibration Effects

A detailed assessment of noise and vibration effects, both during construction and once the Project is operational, has been carried out using the processes set out in the applicable national standards (NZS 6803 and NZS 6806).

Once operational, the Project will have significant acoustic benefits by reducing road-traffic noise levels through Ashhurst and around the outskirts of Woodville.

Residual potential adverse effects are being addressed by:

- the use of a low-noise road surface (such as OGPA) in Ashhurst, on Napier Road east of the Cambridge Ave intersection, and through Woodville; and
- by setbacks and anticipated road treatments to minimise effects of engine braking by trucks at the two roundabouts and on the lower eastern slopes.

Vibration effects from the operation of vehicles on the new highway will be minor.

With normal good practice management, noise and vibration from construction activities should likewise be minor, due to the separation of works from most houses.

Landscape, Visual, and Natural Character Effects

As a major roading development, the Project will inevitably result in large-scale changes to the landscape and the natural character of watercourses and their margins. The extent of those effects varies along the Project's length.

The Project will also give rise to adverse visual effects, which for the most part can readily be mitigated.

Landscape and visual experts have been involved throughout the route selection process and design of the Project with the aim of avoiding or minimising adverse effects and devising a strategy to mitigate residual effects.

Those guiding aims of avoidance and minimising, and the measures proposed to mitigate adverse landscape and visual effects, are enshrined in the ECDF and other proposed designation conditions.

The western end of the Project is particularly sensitive, in terms of landscape and natural character values and potential visual effects. A new bridge will be built across the Manawatū River (in a location identified as an Outstanding Natural Landscape, and near the culturally significant Parahaki Island), the northern abutment of the bridge will interact with an area of significant ecological value, and the area of hill country above contains forest areas subject to Queen Elizabeth II Trust open space covenants.

The design of these Project elements, and the measures to mitigate adverse effects, will continue to be a focus during the detailed design of the Project, guided by tangata whenua, landscape experts and other specialists. The ECDF, a specific bridge design philosophy, and the proposed conditions will incentivise the designers to achieve high-quality design outcomes and avoid – or else minimise – adverse effects.

Likewise, the Project passes through several areas of high natural character, and there will be a strong focus (guided by the ECDF and other designation and resource consent conditions) on avoiding effects that would significantly diminish the attributes and qualities of those areas.

Some native vegetation will be removed to construct the Project and, as discussed below, extensive mitigation and offsetting is proposed.

Terrestrial Ecology Effects

A new road across the Ruahine Range will inevitably affect indigenous vegetation and habitats of indigenous fauna. At the Long List stage, expert ecological advice was central in ruling out a number of the route options assessed; in respect of all four options in the Short List, it was clear that ecological constraints would need to be managed carefully.

The chosen route option avoids the Manawatū Gorge Scenic Reserve, which is a large area containing significant ecosystems, and successfully avoids many other nearby stands of indigenous forest, including three areas protected by Queen Elizabeth II Trust open space covenants. Around 90% of the area proposed to be designated is grazed agricultural land.

That said, the area proposed to be designated includes ten distinct native ecosystem types and areas, ranging in ecological value from low to very high.

The NZ Transport Agency's proposed approach, guided by advice from expert ecologists, is to:

- retain flexibility to affect lower value ecosystems that can be replaced in relatively short timeframes by replacement planting;
- manage effects on higher value ecosystems through avoidance and minimisation of effects; this will be achieved by specific 'effects envelopes' identified by experts,

- which are to be given effect through designation conditions that ensure effects will be kept within acceptable limits; and
- implement a proposed package of mitigation and offset measures, guided by tangata whenua, ecologists, and the Department of Conservation, that will achieve a net gain in indigenous biological diversity. That package will be scaled to mitigate the effects of the final design of the proposed road and could entail a very large area possibly over 100 hectares of newly planted forest.

The Project's adverse effects on fauna will be addressed, in part, through those same avoidance, replacement planting, and offset measures. Specific management measures and responses will be provided for lizards and birds. Bio-acoustic surveys have not identified any bats in the Project area and further surveys will be undertaken this coming summer (2018/19).

The Project will achieve a net gain in indigenous biological diversity, including of indigenous fauna.

Effects on Historic Heritage and Archaeology

While the Ruahine Range is highly valued by tangata whenua, as discussed above, the Project will not affect any recorded archaeological site (or any heritage building).

There is the potential to encounter unrecorded archaeological sites during construction. Designation conditions are proposed to address any such discovery and ensure appropriate procedures, including cultural protocols agreed with tangata whenua, are followed.

A process for addressing potential effects on archaeological sites is governed by the Heritage New Zealand Pouhere Taonga Act 2014, which sets out the requirements for obtaining the appropriate permissions. The NZ Transport Agency will seek authorities through that separate process in due course.

Other Effects

As noted above, resource consents will be sought in 2019 for works in water courses, stream diversions, large-scale earthworks, discharges of stormwater, vegetation clearance and other matters. The effects of those activities will be assessed in detail at that time, including hydrological effects (that will consider, amongst other things, any bridge piers that may be proposed in the Manawatū River) and other effects on streams. Detailed measures will be proposed to ensure that those effects are addressed appropriately.

Other effects of allowing the NoRs include effects arising from the acquisition of private property; the land required for the Project includes Crown land, Council-owned land (including road reserves), and privately-owned property. The NZ Transport Agency is seeking to acquire all land required for the Project that is in private ownership along the route. Property owners whose land is required for the Project have been advised and made aware of the extent required. These discussions are ongoing.

Effects on access to properties have been identified and alternative access provided through the Project's design. Specific property requirements will be discussed and agreed with the land owner as part of the land acquisition/ access agreements process. Specific

solutions have been identified to minimise effects on Meridian and AgResearch, and the details will be worked through in conjunction with those and other landowners.

8. MANAGEMENT OF ADVERSE EFFECTS ON THE ENVIRONMENT

The potential adverse effects on the environment of allowing the NoRs have been avoided or will be mitigated/offset through integrated processes of selecting a preferred route and shaping the proposed designations, and through a robust set of proposed designation conditions.

In the event that the NoRs are confirmed, Tararua District Council, Manawatū District Council, and Palmerston North City Council will oversee implementation of the designation conditions within their respective jurisdictions.

As explained above, development of the proposed designation boundaries and conditions has involved a multi-disciplinary team of technical experts and has been informed by public consultation and on-going stakeholder engagement.

A multi-disciplinary process was also used to identify the proposed mitigation measures incorporated into the design of the Project. Examples are the provision of a low-noise road surface on sections of the highway, and extensive ecological planting and other offsetting measures.

The proposed designation conditions address a wide range of potential issues and considerations, including:

- stakeholder and wider community engagement and participation;
- construction management (including reducing construction effects on specific areas such as Parahaki Island);
- landscape, visual amenity, and natural character effects;
- potential ecological effects;
- construction noise and vibration, and operational noise;
- construction traffic;
- tangata whenua values;
- archaeology and historic heritage; and
- network utilities and other sensitive areas (including QEII National Trust open space covenants, the AgResearch field trial site, and Meridian's wind farm).

Implementing this conditions framework will ensure that the effects of allowing the NoRs are appropriately avoided, remedied, mitigated (including offset) in accordance with statutory requirements and the commitment by the NZ Transport Agency to best practice.

9. STATUTORY MATTERS

A wide range of objectives and policies in national, regional, and local policy and other planning instruments are relevant to the NoRs. The Project has been assessed against these provisions, and the main conclusions are as set out below.

- The Project is a key priority in the National Land Transport Programme 2018 2021 and in Horizons' Regional Land Transport Plan; the Project will result in important safety improvements, improve efficiency in freight movements and significantly reduce travel times, and improve network resilience.
- The Project is consistent with the objectives and policies of the relevant national and regional statutory planning documents.
- The Project is generally consistent with the relevant policies of the Palmerston North City Council, Manawatū District Council, and Tararua District Council Plans.
- The Project will enable communities at a local, regional, and national level to provide for their social, economic, and cultural wellbeing.
- The Project will sustain the potential of natural and physical resources for future generations, and safeguard the life-supporting capacity of air, soils, water, and ecosystems.
- The adverse effects on the environment of allowing the NoRs will be sufficiently avoided, remedied, or mitigated to satisfy the requirements of section 5 of the RMA.
- The Project provides for, and has appropriately responded to, the matters in sections 6, 7, and 8 of the RMA.
- The sustainable management purpose of the RMA will be achieved by confirming the NoRs.

The NZ Transport Agency will continue to work apace to secure the necessary RMA approvals, construct the new highway, and deliver this important Project for the Manawatū-Whanganui, Wairarapa, and Hawke's Bay regions as soon as possible.



New Zealand Government

To find out more:

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